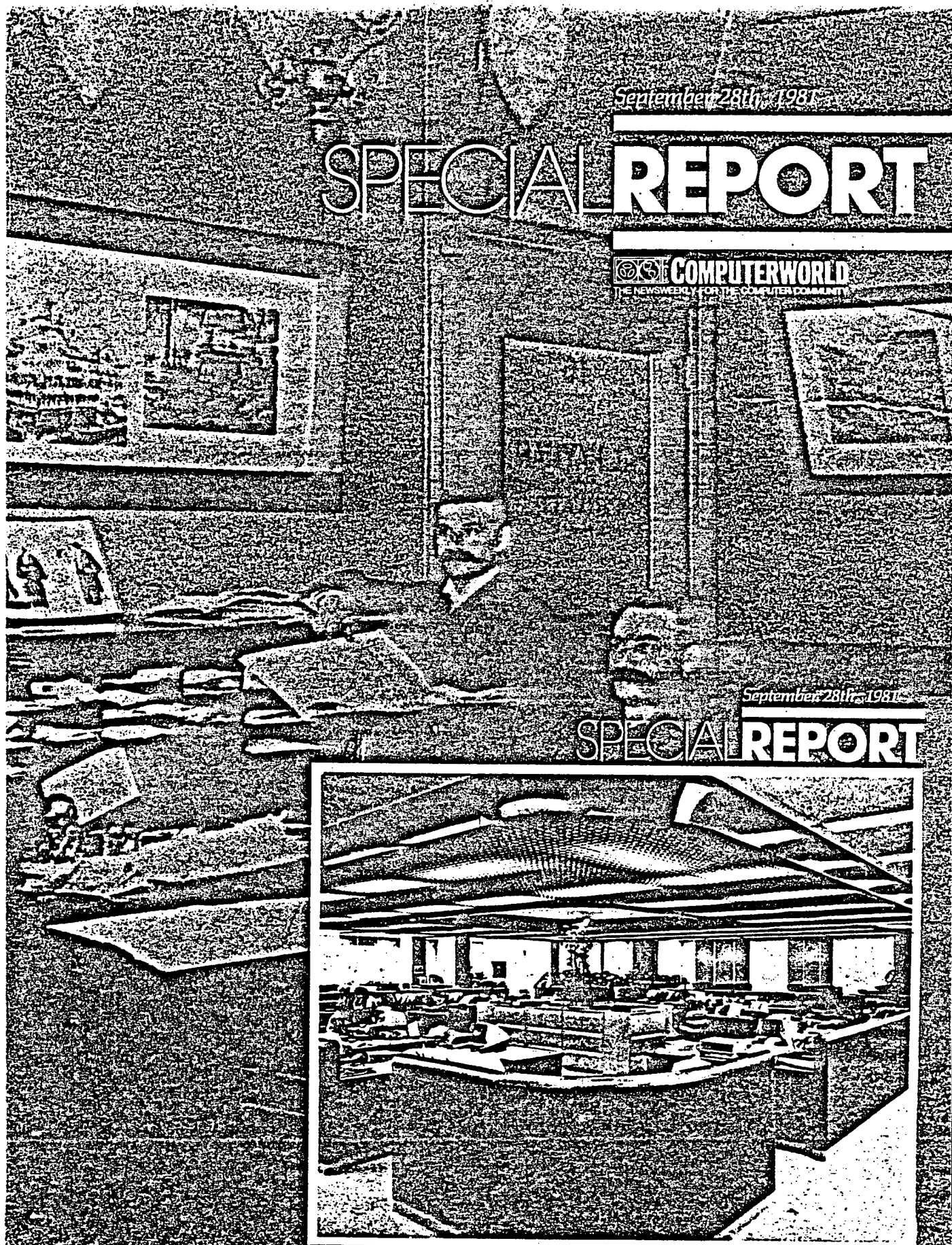


ATTACHMENT E

September 28th, 1981

# SPECIAL REPORT

**COMPUTERWORLD**  
THE NEWSWEEKLY FOR THE COMPUTER COMMUNITY



September 28th, 1981

## SPECIAL REPORT

### AUTOMATING THE OFFICE: AN EVOLUTION IN INTEGRATION

# TELECONFERENCING

- *As Easy to Use as the Telephone*
- *As Natural as Face-to-Face Meetings*

## AM Jacquard Systems

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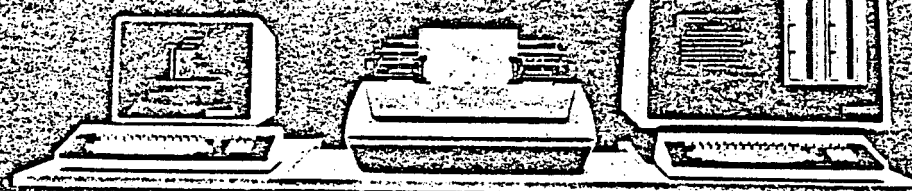
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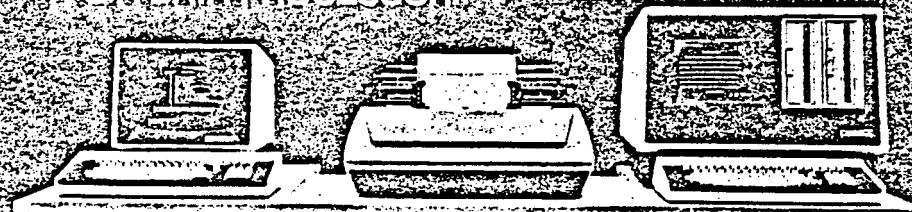
The AM Jacquard J121 is designed to boost your office's productivity and profitability. No one, but no one, offers so much versatility and flexibility for the money. And we know what we're talking about. Our parent company, AM International, Inc., has been designing products to modernize offices for more than 90 years.

If you want to know more—and you should—about our Datapro award-winning J121, contact AM Jacquard Systems, the Informationists, a division of AM International, Inc., Dept. 777, 3340 Ocean Park Blvd., Santa Monica, CA 90405. (213) 450-1242, Ext. 777.

### IT'S A WORD PROCESSOR



### IT'S A DATA PROCESSOR



### IT'S A STEAL AT THE PRICE



By Huntley Miller  
Special to CW

Even as it offers users time and cost savings, teleconferencing may also be ushering in the "global village," drawing organizations closer together through video and audio communications.

In 1979, corporations spent approximately \$290 billion on meetings, or 42% of their total expenditures on office communications. Over \$270 billion, including the costs of equipment, travel and people time, were associated with meetings to which at least one person traveled more than one mile, an event which occurred in two-thirds of the meetings. The bulk of that money, \$200 billion, was spent on a small portion of travel meetings that involved someone traveling distances greater than 350 miles.

In addition to high costs in terms of people, energy, unproductive time, the inconvenience of travel and difficult scheduling all are contributing to the push for teleconferencing.

Teleconferencing is defined as three or more people from two or more locations communicating electronically. It can occur in three modes:

- Audio; voice only.
- Audio graphics; voice plus the transmission of visuals, text, interactive writing and/or still images.
- Full motion video; voice plus moving images.

At AT&T, we studied people's current travel meeting behavior to determine what kind of meetings could best take advantage of the benefits of teleconferencing.

#### Meeting Activities

The type of activities that occur in meetings are: presenting reports (11%), providing status (16%), sharing information (35%), convincing (9%), negotiating (8%) and solving conflicts (20%). Sixty percent of the meetings are intracompany, while the remainder take place among two or more organizations.

Meetings that are the most suitable for substitution involve people who already know each other and those that are low in conflict, such as project review meetings. Other types are training, ad hoc program solving, briefing and policy dissemination and emergency communication. However, all traveling would not stop since only 50% of travel meetings were found to be suitable for teleconferencing.

#### Audio Meetings Only

Of the meetings that teleconferencing can replace, 80% can be held by audio and audiographic means. For example, monthly sales meetings are held in New York City, which require company personnel to travel from Philadelphia and San Francisco.

Holding this meeting via audio teleconferencing, conferees in Philadelphia and San Francisco would hear the presentation and participate in the discussion, yet not see the materials unless they had been sent out ahead of time.

Because people concentrate harder in an audio teleconference than in a face-to-face meeting to assimilate the information, teleconference tends to be more rigid and somewhat tiring. On the other hand, they are shorter

and more to the point. People can turn that time savings into productive work. The savings in travel expenses and time outweigh the negatives of audio teleconferencing.

Adding the transmission of visuals in real-time changes an audio meetings into an audiographic teleconference. The conferees in Philadelphia and San Francisco hear the presentation and see the materials that are being presented — vugraphs or slides — without seeing the speaker.

Having visuals on which to focus their attention, participants become less tired than in an audio teleconference. Audiographic teleconferences still tend to be shorter than face-to-face meetings because there are not the distractions of body language, facial expressions or side conversations.

Users do not always have to see the

*'Having visuals on which to focus their attention, participants become less tired than in an audio teleconference.'*

people with whom they are meeting in order to conduct business meetings, rather they need to hear them and see the materials being presented.

The remaining 20% of meetings potentially replaced by teleconferencing needs to be conducted over full motion video. There are times when people need to see body language and facial expressions of the people with whom they are talking, for example, meetings that involve persuasion or negotiation.

To be successful, teleconferencing systems must be as easy to use as the telephone and as natural as conducting meetings face-to-face. The equipment must be user-friendly and training will need to take place so that users can learn how to conduct teleconferences, use the equipment and manage meetings effectively.

When first using teleconferencing, meetings tend to be rigid and awkward because people lack some visual cues and are unsure when to contribute to the discussion.

Having installed a teleconferencing system, users should track who uses it, which departments and for what purposes. Most users will not care where the capabilities are housed as long as the system works and is easy to use.

User's needs imply end-to-end compatibility of the system, which means coexistence with PBXs, networks, controllers and terminals. The system must be flexible to adapt and match the current and future needs of the organization.

#### Travel Dollars Saved

Success of a teleconferencing system can be evaluated by hard dollars saved in travel and value-added measures such as better information flow and faster decision making. Teleconferencing does not require a major change in work habits and user training is small compared with other types of office automation technologies. Traveling can always be used as a backup alternative to teleconferencing.

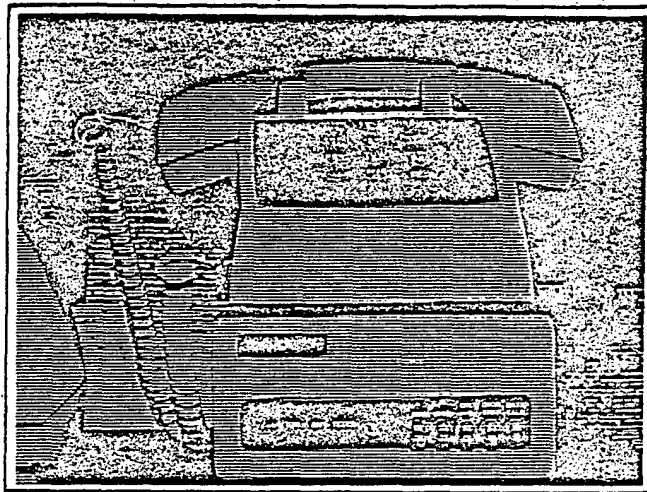
Corporations can realize savings in travel costs, reduction in operating expenses and gains in productivity.

Faster decision making results from shorter decision intervals since face-to-face meetings, which are postponed because people's schedules do not allow them the time to travel, can be held quickly without regard for time or distance.

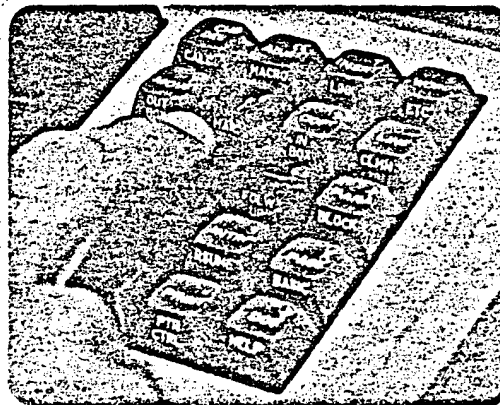
Quality of decisions improve, since people who otherwise would not have the time to travel to a meeting could attend remotely. Better coordination of management could occur since meetings would involve all the affected people. Managers can remain where they are needed, their talents shared and their time more efficiently allocated.

Corporations see improvements in productivity, cost control and management, while users see the personal gains in doing their job better.

Miller is a staff manager in office communications at AT&T.



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